

### **REMARKS**

This amendment is responsive to the Office Action of May 29, 2007. Reconsideration and allowance of claims 2-19 and 21-23 are requested. The specification and drawings have been amended as per the Examiner's requests. An acknowledgement of such is earnestly solicited.

#### **The Office Action**

Claims 1-20 stand rejected under 35 U.S.C. §102(e) as being anticipated by Tumer, et al. (U.S. Patent Application No. 2003/0141906).

The specification has been objected to as containing informalities.

The drawings have been objected to as failing to contain certain reference numerals.

#### **The Reference of Record**

**Tumer** discloses an application specific integrated circuit for detecting high energy electromagnetic radiation or charged particles in a relatively broad range of applications. To discern the timing of the signals, Tumer uses at least one analog signal source that oscillates at 20 MHz.

#### **The Claims Distinguish Patentably Over the References of Record**

**Claim 3** has been placed in independent form including all the limitations of claim 1. The scope of claim 3 has not changed. Claim 3 has not been amended for purposes of patentability.

Claim 3 calls for at least one clock that measures the time in units of a uniqueness interval of a first analog time signal. Tumer fails to teach or reasonably suggest a clock that measures time according to a uniqueness interval of the time signal. While table 5 of Tumer references a 20 MHz "clock," it is submitted that the "clock" finds antecedent basis in the sine wave inputs **31, 32** of Fig. 1, e.g. oscillators. No further discussion of the clock is provided. In order to anticipate the present application, Tumer must disclose all of the claimed limitations, and Tumer does not disclose both a time signal source and a clock that measures time according to a uniqueness interval of the analog time signal. It is therefore respectfully requested

that **claim 3** as well as **claims 2, 4, 5,** and **7-9** dependent therefrom distinguish patentably and unobviously over the references of record.

**Claim 6** has been placed in independent form including limitations from claims 1 and 5. Claim 6 calls for the second analog signal source to be coupled to the first analog signal source. Tumer fails to teach or reasonable suggest such coupling. As can be seen in Applicant's FIGURE 6, there is a coupler **22** that couples the first **10** and second **21** analog signal sources. This coupler **22** is described in the Applicant's specification as a phase locked coupling loop, e.g. at page 9, line 26, *et seq.* Although not so limited in claim 6, new claim 21 has been added to specifically claim the phase locked coupling loop. Tumer does not show such coupling in the figures, nor is it discussed in the specification of Tumer. As a reference cannot anticipate a claim under §102 without teaching each claimed element, Tumer fails to anticipate claim 6. It is therefore respectfully submitted that **claim 6** and **claim 21** dependent therefrom distinguish patentably and unobviously over the references of record.

**Claim 10** now calls for assigning the momentary value an absolute time value by consulting a clock that measures time in units of a uniqueness interval of the analog time signal. Tumer fails to teach a clock that measures time in units of a uniqueness interval of the analog time signal. It is therefore respectfully submitted that **claim 10** and **claims 11-15** dependent therefrom now distinguish patentably and unobviously over the references of record.

Similarly, **claim 16** now calls for a clock for translating the first momentary value into an absolute time value, wherein the clock measures the time in units of a uniqueness interval of the first analog time signal. As discussed with claim 3 and claim 10, Tumer fails to teach such a clock. It is therefore respectfully submitted that **claim 16** and **claims 17-20** dependent therefrom now distinguish patentably and unobviously over the references of record.

New claim 23 has been added to claim aspects not shown by Tumer.

**Amendments to the Drawings:**

The reference numeral E1 has been added to FIGURE 3. The reference numerals E1 and E1' have been added to FIGURE 4. Replacement sheets are included herewith.

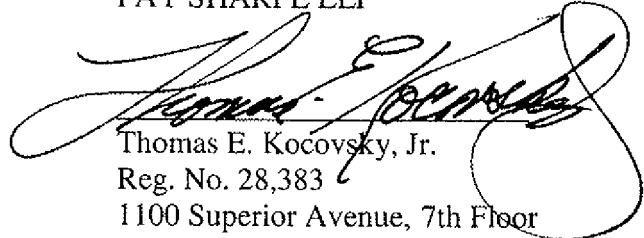
**CONCLUSION**

For the reasons set forth above, it is submitted that claims 2-19, 21-23 distinguish patentably over the references of record and meet all statutory requirements. An early allowance of all claims is requested.

In the event the Examiner considers personal contact advantageous to the disposition of this case, she is requested to telephone Thomas Kocovsky at (216) 861-5582.

Respectfully submitted,

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